# 50 Hughes: Arthroplasty for Ankylosis of Temporo-Mandibular Joint

duration. Child pale and thin, but not very ill. There was a bilateral, symmetrical swelling of the malar bones and slight beading of the ribs. No other signs of rickets. Up to this date patient's development had been normal. Wassermann reaction negative in both mother and child. Patient has attended Out-Patients' Department since at regular intervals, and during this time the bony swelling over the left malar region has slowly increased in size, causing a slight but definite proptosis of the left eye. The swelling over the right malar region has not increased in size, and possibly it is even smaller than when first seen. X-ray examination of the skull gives no information as to the nature of the swelling. The urine contains no abnormal constituents.

Dr. F. PARKES WEBER thought the bony swelling on the left side of the skull was allied to what was formerly called leontiasis ossea, and was due to a condition of osteitis fibrosa.

### Three Cases of Arthroplasty for Ankylosis of the Temporo-Mandibular Joint.

## By E. C. Hughes, O.B.E., M.Ch.

Case I.—W. R., male, aged 10. In May, 1921, the right side of his face became swollen and two teeth were extracted. The swelling did not subside, and in the following August an incision was made on the inner side of his cheek and non-purulent serous fluid evacuated. A month later two lower milk molars were extracted and both the external and internal alveolar margins were found to be necrosed. They were removed. After that there was very little discharge, but there was a continuous offensive smell. Later, the right side of the face again became swollen from bony overgrowth of the mandible.

In June, 1922, a sequestrum was removed. In October of the same year he was again admitted for disability of mastication. Another sequestrum was removed. The lower jaw was then slightly deviated to the right, and the left side was not well developed. In December of the same year the articular process of the lower jaw on the right side became loose and was removed.

In June, 1926, he was re-admitted into hospital for ankylosis of the right temporo-mandibular joint. The new bone, condyle, and coronoid process were removed.

Case II.—D. W., female, aged 11. Fixation and immobility of the lower jaw noticed by the mother three weeks after birth. There was no history of accident.

Patient admitted to Guy's Hospital at the age of 4 in June, 1919, when it was noticed that she had no chin, but enlargement and bulging of the right cheek with flatness of the left. The mandible was deviated towards the right. The lower teeth sloped backwards, and between the upper and lower rows there was an interval of about ½ in. There was absolute fixation of the lower jaw; patient had never eaten any solid food and her power of speech was very poor.

The right joint was then operated upon and the neck of the mandible was found to be short and thick. It expanded into the condyle without the definite thinning occurring normally. The condyle was flattened rather than rounded. Between it and the fossa no trace of the articular cartilage was found, but there was a dense band of fibrous tissue. This was removed, together with the condyle and part of the neck. A strip of temporal fascia was then inserted between the fossa and the stump of the neck of the mandible. A week later the left side was opened, but the joint was found to be normal.

Case III.—R. M., male, aged 18. Patient said he was knocked over by a bicycle

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about fourteen years ago and both his skull and mandible were fractured. Ever since then he has been unable to open his mouth.

In February of this year he was admitted to Guy's Hospital, and he could then only depress his mandible about  $\frac{1}{4}$  in. The mandible was retracted about  $\frac{1}{2}$  in. behind the maxilla, and there appeared to be considerable thickening in the region of the temporo-mandibular joints on both sides. X-ray examination failed to reveal the site of the old fracture, though it appeared that the right joint was more seriously affected than the left. The right side was therefore opened first, and when the joint was exposed firm, bony ankylosis was found. The condyle and part of the neck of the ascending ramus were removed so that a gap of about  $\frac{1}{4}$  in. was left between the two bony surfaces. Into this a piece of temporal fascia was inserted. A week later the left side was opened and a similar, though less difficult, operation was performed.

Two dental props were then placed in the mouth in the molar region. At first these were left in altogether for two days. They were then removed for meals, and later throughout the day; movement of the lower jaw being encouraged by the use of chewing gum, etc. More recently patient has been fitted by the Dental Department with a special prop to wear at night.

On February 21 he could separate his teeth sufficiently well to enable him to push his tongue between them, and the range of movement is steadily increasing. There is still, however, some resistance on the right side which may need further operative treatment.

# Syringomyelia with Charcot's Shoulder.

## By C. P. SYMONDS, M.D.

G. B., AGED 27, male. First attended hospital in May, 1926, on account of pain and swelling in the right shoulder.

His story was that two days before, on a Sunday evening, he had felt a sharp pain on the right side of his neck, which ran down into his shoulder; subsequently there was swelling of the shoulder and some pain on movement, but he went to work as usual on the following day.

On examination there was found to be great swelling of the right shoulder, apparently due to distension of the shoulder-joint, together with compression of the veins; for there was some ædema of the arm, extending down to the back of the hand. Active movement was limited, passive movement was free but somewhat painful, and was attended by marked crepitus in the joint.

X-ray examination showed: (1) extensive destruction of the upper end of the humerus, the head of the bone having completely disappeared, (2) a fracture of the greater tuberosity, and (3) new bone formation in the soft tissues.

Neurological examination showed an area of dissociated anæsthesia involving on the left side the fourth cervical root area, extending across the chest to the right shoulder and involving the cervical root areas 4 to 8 and the thoracic root area 1 on this side. The tendon jerks of both arms were absent and the plantar response from the right foot was extensor. Over these areas cotton-wool sensation was normally appreciated, the painful element of pin-prick was not felt, heat and cold were imperfectly distinguished, sense of position and passive moment were normal. There was no noticeable muscular wasting or weakness.

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